Forest Health Protection
Pacific Southwest Region

Date: August 30, 2010
File Code: 3420

To: Thomas Contreras, Forest Supervisor, Mendocino National Forest

Subject: Biological Evaluation of Buttermilk Thin – Grindstone Ranger District (FHP Report No. N10-012)

On August 17-19, 2010, Cynthia Snyder (Entomologist) and Pete Angwin (Plant Pathologist) from Forest Health Protection visited the Mendocino National Forest to assess future thinning projects requesting FHP funding.

On August 17 and 19, Cynthia, Pete and Roger were joined by Nancy Mulligan, Art Quintana, Rick Mowery (TEAMS) and Daren Dalrymple (Grindstone Ranger District) to look at possible Western Bark Beetle Initiative funding for the Buttermilk LSR Plantations planned for thinning in FY2011 and FY2012.

Observations and recommendations for the planned projects areas are as follows:

Sugar and Smokey Portions
The Buttermilk LSR Thin is divided into two portions: the Sugar portion is 197 acres of mixed conifer plantations created in 1994, and the Smokey portion is 400 acres of mixed conifer plantations created in the 1980s and 1990s. All stands are within the Buttermilk LSR and some stands are part of the Smokey Strategically Placed Landscape Area Treatments (SPLAT). The stands are primarily ponderosa pine with Douglas-fir, incense cedar and sugar pine components with white fir seeding into the understory. Stands are currently very dense and showing signs if inter-tree competition (Figure 1). There are small pockets of pine mortality throughout the area attributed primarily to western pine beetle in or near areas of disturbance such as fire or blowdown (Figure 2). NEPA was completed in 2010 for this project. Much of the treatment of the Smokey Plantations will contribute to the enhanced development of late successional stand characteristics in the plantations, 74 acres of the Smokey plantations located in SPLATS and thinning will create the desired fuel condition for the SPLAT. The plantations will be hand thinned from below to a 20-25 foot spacing, the brush species will be cut at ground level and both the brush and tree slash will be hand piled. The piles will be burned by district personnel.

NORTHERN CALIFORNIA SHARED SERVICE AREA
3644 AVTECH PARKWAY, REDDING, CA 96002
530-262-2437

Cynthia Snyder, *Entomologist*
clsnyder@fs.fed.us

Pete Angwin, *Plant Pathologist*
pangwin@fs.fed.us

Tatham Ridge Fuelbreak Portion

The Tatham Ridge Fuelbreak portion consists of 160 acres of plantations created in the 1980s located within and adjacent to the Buttermilk LSR. Fuelbreak construction was started in 2008 with the Kingsley Fuelbreak. These treated acres provide a preview of the desired outcome of the proposed treatments (Figure 1) Plantations are primarily ponderosa pine with some sugar pine and white fir, about 300 TPA, with an average diameter of 6-10 inches (Figure 2). There are scattered pockets of western pine beetle mortality in ponderosa pine, some mountain pine beetle in sugar pine and fir engraver in white fir.

The Tatham Ridge Fuelbreak NEPA analysis is scheduled to be completed in April of 2011. Combining the plantation thinning with the fuelbreak construction would result in a lower cost per acre than if the plantations were treated separately. The plantations will be thinned to a 25' X 25' spacing.

Supporting Details	
Forest Type	Plantations
Location	Buttermilk LSR and some WUI
Landscape Treatment	760 acres of thinning and burning
Proposed Treatment	Hand-thinned to 20 foot spacing, slash hand-piled and burned
NEPA	Buttermilk and Smokey have NEPA completed. Tatham Ridge will have NEPA completed April 2011
Proposed Acres	197 acres in Butttermilk, 400 acres in Smokey, 160 acres in Tathum Ridge
Requested Funding	$380,000
Total Cost Per Acre	$500
Matching Funding	NEPA, layout and contract preparation completed with appropriated funding
Species Composition	Mixed conifer - ponderosa pine, sugar pine, Douglas fir, white fir, incense cedar, black oak, madrone
Current Diameters	1-12 inches DBH
Residual Diameters	9+ inches
Current Stocking	300-800 TPA
Target Stocking	110 TPA
Agents of Concern	*D. brevicomis, D. ponderosae*
Recent Activity	Scattered pockets of western pine beetle.
Current Susceptibility	High

Summary

The proposed treatments, if fully implemented, will be effective in addressing concerns regarding bark beetles, fire and drought, and will meet the Regional Forester's density management policy that high risk density levels will not be reached again for at least 20 years. I fully support the treatments as described.

If you have any questions regarding this report and/or need additional information please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

Cynthia Snyder
Entomologist
Northern CA Shared Service Area

CC: Pete Angwin, Sheri Smith, Julie Lydick and Phil Cannon